UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



Region 6 Laboratory
Environmental Services Branch
10625 Fallstone Road, Houston, TX 77099
hone: (281)983-2100 Fax: (281)983-2248 Phone: (281)983-2100

Final Analytical Report

| | Site Name | Oil Trust Fund |
|---|--------------------------------|--|
| | Sample Collection Da | ate(s) 08/12/10 |
| | Contact | Rich Mayer (6PD-F) |
| | Report Date | 08/18/10 |
| | Project # | 10REG231 |
| | Work Order(s) | 1008026 |
| | | |
| | | |
| Analyses included in this | s report: | |
| LC DOSS | | |
| Report Narrative | <u>,</u> | |
| | • | |
| DOSS was not found | l at or above the reporting li | mit for the samples in this work order. |
| | ple results. The results app | quality control were followed in the analysis and oly only to the samples tested. This final report |
| Reporting limits are a | adjusted for sample size and | matrix interference. |
| | | |
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| Report Approvals: | | |
| Richard McMillin | | David Nalaigh |
| Richard McMillin Region 6 Laboratory Ma | anager | David Neleigh Region 6 Laboratory Branch Chief |

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road Houston, Texas 77099

Sample Receipt and Disposal

| Site Name: Oil Trust Fund | Project Number: 10REG231 | | | | |
|---|--|--|--|--|--|
| Data Management Coordinator: Christy Warr | | | | | |
| | / / | | | | |
| Data Management Coordinator Signature | Date | | | | |
| Date Transmitted:/ | | | | | |
| Please have the U.S. EPA Project Manager/Or comments or questions. | fficer call the Data Management Coordinator at 3-2137 for any | | | | |
| Please sign and date this form below and return | rn it with any comments to: | | | | |
| Christy Warren Data Management Coordinator Region 6 Laboratory 6MD-HS | | | | | |
| Received by and Date | | | | | |
| Comments: | | | | | |
| The laboratory routinely disposes of samples hold these samples in custody longer than 90 | 90 days after all analyses have been completed. If you have a need to days, please sign below. | | | | |
| Signature | Date | | | | |
| Please provide a reason for holding: | | | | | |



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ANALYTICAL REPORT FOR SAMPLES

| Station ID | Laboratory ID | Sample Type | Date Collected | Date Received |
|-----------------------|---------------|-------------|----------------|----------------|
| T008-0028-100812-SW-1 | 1008026-01 | Liquid | 8/12/10 11:25 | 08/13/10 07:28 |
| T008-0029-100812-SW-1 | 1008026-02 | Liquid | 8/12/10 10:30 | 08/13/10 07:28 |
| T008-0030-100812-SW-1 | 1008026-03 | Liquid | 8/12/10 9:55 | 08/13/10 07:28 |

Report Name: 1008026 FINAL 08 18 10 1435 Page 1 of 8



Batch: B0H1302

Sample Type: Liquid

Environmental Protection Agency

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

DOSS by LC/MS/MS

Station ID: T008-0028-100812-SW-1 Lab ID: 1008026-01

> Date Collected: 08/12/10 Sample Volume: 24 ml

Sample Qualifiers:

Surrogates

| Analyte | Result µg/l | Analyte Qualifiers | %Recovery | %Recovery Limits | Prepared A | Analyzed |
|----------------|-------------|-----------------------|-----------|---------------------|------------|----------|
| Surr: DOSS-D34 | 96.3 | | 57.8 | 50-150 | 08/13/10 | 08/14/10 |

Targets

| Analyte (CAS Number) | Result µg/l | Analyte Qualifiers | Reporting Limit | Dilution | Prepared Analyzed |
|--|----------------|-----------------------|--------------------|----------|-------------------|
| Dioctyl sulfosuccinate, sodium salt (577-11-7) | U | | 19.6 | 1 | 08/13/10 08/14/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.

Report Name: 1008026 FINAL 08 18 10 1435

Page 2 of 8



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

DOSS by LC/MS/MS

Lab ID: 1008026-02 Station ID: T008-0029-100812-SW-1

Batch: B0H1302 Date Collected: 08/12/10 Sample Volume: 23 ml Sample Type: Liquid

Sample Qualifiers:

Surrogates

| Analyte | Result µg/l | Analyte Qualifiers | %Recovery | %Recovery Limits | Prepared Analyzed |
|---|----------------|-----------------------|--------------------|---------------------|-------------------|
| Surr: DOSS-D34 | 119 | | 68.4 | 50-150 | 08/13/10 08/14/10 |
| | | Targets | | | |
| Analyte (CAS Number) | Result µg/l | Analyte Qualifiers | Reporting Limit | Dilution | Prepared Analyzed |
| Dioctyl sulfosuccinate sodium salt (577-11-7) | IJ | | 19.6 | 1 | 08/13/10 08/14/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.

Report Name: 1008026 FINAL 08 18 10 1435

Page 3 of 8



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

DOSS by LC/MS/MS

Lab ID: 1008026-03 Station ID: T008-0030-100812-SW-1

Batch: B0H1302 Date Collected: 08/12/10 Sample Volume: 23 ml Sample Type: Liquid

Sample Qualifiers:

Surrogates

| Analyte | Result µg/l | Analyte Qualifiers | %Recovery | %Recovery Limits | Prepared Analyzed |
|---|----------------|-----------------------|--------------------|---------------------|-------------------|
| Surr: DOSS-D34 | 124 | | 71.4 | 50-150 | 08/13/10 08/14/10 |
| | | Targets | | | |
| Analyte (CAS Number) | Result µg/l | Analyte Qualifiers | Reporting Limit | Dilution | Prepared Analyzed |
| Dioctyl sulfosuccinate sodium salt (577-11-7) | IJ | | 20.0 | 1 | 08/13/10 08/14/10 |

This LC/MS/MS method is a developmental method that was created specifically for the Gulf oil spill by the Region 6 lab in conjunction with other EPA laboratories. Therefore it has not been validated with the normal rigorous procedures and performance data that an EPA method would normally complete before being released. Improvements will continue to be made to this method as more is learned about the nuances of this technique with these analytes and various matrices. Proper sample collection or preservation procedures have not been established and holding times are unknown.

Report Name: 1008026 FINAL 08 18 10 1435

Page 4 of 8



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

DOSS by LC/MS/MS - Quality Control

Batch: B0H1302 Sample Type: Liquid

Blank (**B0H1302-BLK1**)

Prepared: 8/13/2010 Analyzed: 8/14/2010

Surrogates

| | Result | Analyte | Spike | | %REC |
|----------------|--------|-----------|-------|------|--------|
| ANALYTE | μg/l | Qualifier | Level | %REC | Limits |
| Surr: DOSS-D34 | 155 | | 200 | 77.6 | 50-150 |

Blank (**B0H1302-BLK1**)

Prepared: 8/13/2010 Analyzed: 8/14/2010

Targets

| ANALYTE | | Analyte Reporting Qualifiers Limit | |
|--------------------------------|---|------------------------------------|--|
| Dioctyl sulfosuccinate, sodium | U | 20.0 | |

salt

LCS (B0H1302-BS1)

Prepared: 8/13/2010 Analyzed: 8/14/2010

Surrogates

| ANALYTE | Result µg/l | Analyte Qualifier | Spike Level | %REC | %REC Limits |
|----------------|----------------|----------------------|----------------|------|----------------|
| Surr: DOSS-D34 | 168 | | 200 | 84.1 | 50-150 |

LCS (B0H1302-BS1)

Prepared: 8/13/2010 Analyzed: 8/14/2010

Targets

| ANALYTE | Result | Analyte Reporting | Spike | %REC |
|-------------------------------------|--------|-------------------|-------|-------------|
| | µg/l | Qualifiers Limit | Level | %REC Limits |
| Dioctyl sulfosuccinate, sodium salt | 79.8 | 20.0 | 87.5 | 91.2 50-150 |

Report Name: 1008026 FINAL 08 18 10 1435

Page 5 of 8



Region 6 Laboratory

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DOSS by LC/MS/MS - Quality Control

Batch: B0H1302 Sample Type: Liquid

Matrix Spike (B0H1302-MS1)

Prepared: 8/13/2010 Analyzed: 8/14/2010 Source: 1008026-03

Surrogates

| ANALYTE | Result | Analyte | Spike | %REC |
|----------------|--------|-----------|-------|-------------|
| | µg/l | Qualifier | Level | %REC Limits |
| Surr: DOSS-D34 | 124 | | 174 | 71.5 50-150 |

Matrix Spike (B0H1302-MS1)

Prepared: 8/13/2010 Analyzed: 8/14/2010 Source: 1008026-03

Targets

| ANALYTE | | Analyte Reporting Qualifiers Limit | | | %REC Limits | |
|--------------------------------|------|------------------------------------|------|------|----------------|--|
| Dioctyl sulfosuccinate, sodium | 56.8 | 20.0 | 76.1 | 74.7 | 50-150 | |

salt

Matrix Spike Dup (B0H1302-MSD1)

Prepared: 8/13/2010 Analyzed: 8/14/2010 Source: 1008026-03

Surrogates

| ANALYTE | Result µg/l | Analyte Qualifier | Spike Level | %REC | %REC Limits |
|----------------|----------------|----------------------|----------------|------|----------------|
| Surr: DOSS-D34 | 110 | | 174 | 63.1 | 50-150 |

Matrix Spike Dup (B0H1302-MSD1)

Prepared: 8/13/2010 Analyzed: 8/14/2010 Source: 1008026-03

Targets

| ANALYTE | | Analyte Reporting Qualifiers Limit | | | %REC Limits | RPD | RPD Limit |
|-------------------------------------|------|------------------------------------|------|------|----------------|------|--------------|
| Dioctyl sulfosuccinate, sodium salt | 56.4 | 20.0 | 76.1 | 74.1 | 50-150 | 0.74 | 30 |

Report Name: 1008026 FINAL 08 18 10 1435

Page 6 of 8



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

| Analyses Matrix Collection 100812-SW-1 DOSS Surface Grab 100812-SW-1 DOSS Surface Grab Water Grab Water Grab Water Grab Water Grab | Collected 8/12/2010 8/12/2010 | | | 3 | ao Phone. Zo 1-2 | Lab Phone: 281-983-2137 |
|--|-------------------------------------|-----------------|-------------------|--|------------------|-------------------------|
| DOSS Surface Grab Water DOSS Surface Grab Water DOSS Surface Grab Water | 8/12/2010 | Sample | Numb Cont | Numb Cont Container | Preservativ e | MS/MS D |
| 100812-SW-1 DOSS Surface Grab Water 100812-SW-1 DOSS Water Water | 8/12/2010 | 11.25 | 2 | 2 20 ml VOA | 4 C | z |
| 100812-SW-1 DOSS Surface Grab Water | | 10:30 | 2 | 2 20 ml VOA | 4 C | z |
| Instructions: | 010777 | GCEA | 0 | roop open |) + | - |
| instructions: | | | | | | |
| | | | CHAIN OF CUSTODY# | SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY # | - FKOM | |
| thems/Reason Relinquished by Date Received by Date Time Items | Items/Reason | Relinquished By | dBy Date | Received by | d by Date | e, Time |
| ALL SING SOLD | | Carpin Land | 8-1310 | 1710 Sala | 3.5 | 3 9.28 |

Report Name: 1008026 FINAL 08 18 10 1435 Page 7 of 8

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Notes and Definitions

Α This sample was extracted at a single acid pH.

HTS Sample was prepared and/or analyzed past recommended holding time. Concentrations should be

considered minimum values.

AES Atomic Emission Spectrometer

CVAA Cold Vapor Atomic Absorption

ECD Electron Capture Detector

GC Gas Chromatograph

GFAA Graphite Furnace Atomic Absorption

ICP Inductively Coupled Plasma

MS Mass Spectrometer

NA Not Applicable

NPD Nitrogen Phosphorous Detector

NR Not Reported

TCLP Toxicity Characteristic Leaching Procedure

Undetected U

Out of QC limits

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds per square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.

Report Name: 1008026 FINAL 08 18 10 1435

Page 8 of 8